Listing of Claims

1. (Currently Amended) An eukaryotic host cell genetically engineered to express a p65 NF-kappa-B transcription factor, and to express a protein of interest as an extracellular product, wherein the host cell is adapted to grow in suspension in serum-free medium.

2-3. (Canceled)

- 4. (Previously presented) The host cell of claim 1 wherein the p65 NF-kappa-B transcription factor is expressed under control of a heterologous regulatory element.
- 5. (Original) The host cell of claim 4, wherein the heterologous regulatory element is a viral promoter.
- 6. (Original) The host cell of claim 5, wherein the viral promoter is selected from the group consisting of a CMV promoter, an SV40 promoter, an RSV promoter and an adenoviral promoter.
- 7. (Original) The host cell of claim 1, wherein the protein of interest is selected from the group consisting of a soluble TNF receptor, a soluble IL-4 receptor, a soluble IL-1 type II receptor, a soluble Flt3 ligand, a soluble CD40 ligand, CD39, CD30, CD27, a TEK/Ork, IL-15, a soluble IL-15 receptor, Ox 40, GM-CSF, RANKL, RANK, TRAIL, a soluble TRAIL receptor, tissue plasminogen activator, Factor VIII, Factor IX, apolipoprotein E, apolipoprotein A-I, an IL-2 receptor, an IL-2 antagonist, alphalantitrypsin, calcitonin, growth hormone, insulin, insulinotropin, insulin-like growth factors, parathyroid hormone, interferons, superoxide dismutase, glucagon, an erythropoeitin, an antibody, glucocerebrosidase, an Fc-fusion protein, globins, nerve growth factors, interleukins, colony stimulating factors, and a cytokine.
- 8. (Original) The host cell of claim 1, wherein the host cell is further genetically engineered to express a selectable marker.
- 9. (Original) The host cell of claim 1, wherein the host cell is a mammalian cell.
- 10. (Original) The host cell of claim 9, wherein the host cell is selected from the group consisting of CHO, VERO, BHK, HeLa, CV1, COS, MDCK, 293, 3T3, myeloma, PC12 and WI38.
- 11. (Original) The host cell of claim 1, wherein the host cell is adapted to grow in protein-free medium.
- 12. (Previously presented) The host cell of claim 1, wherein the p65 NF-kappa-B transcription factor is a caspase resistant p65 mutant.

- 13. (Previously presented) The host cell of claim 1, wherein the host cell is genetically engineered to express a second NF-kappa-B transcription factor.
- 14. (Withdrawn) A method of producing a protein of interest, the method comprising culturing an eukaryotic host cell genetically engineered to activate the NF-kappa-B transcription factor complex, and to express a protein of interest as an extracellular product, under conditions such that the protein of interest is expressed and secreted.
- 15. (Withdrawn) The method of claim 14, further comprising collecting the protein of interest.
- 16. (Withdrawn) The method of claim 14, wherein the host cell is genetically engineered to express an NF-kappa-B transcription factor.
- 17. (Withdrawn) The method of claim 16, wherein the NF-kappa-B transcription factor is selected from the group consisting of p65, p50, cRel, p52 and RelB.
- 18. (Withdrawn) The method of claim 16, wherein the NF-kappa-B transcription factor is expressed under control of a heterologous regulatory element.
- 19. (Withdrawn) The method of claim 18, wherein the heterologous regulatory element is a viral promoter.
- 20. (Withdrawn) The method of claim 19, wherein the viral promoter is selected from the group consisting of a CMV promoter, an SV40 promoter, an RSV promoter and an adenoviral promoter.
- 21. (Withdrawn) The method of claim 14, wherein the protein of interest is selected from the group consisting of a soluble TNF receptor, a soluble IL-4 receptor, a soluble IL-1 type II receptor, a soluble Flt3 ligand, a soluble CD40 ligand, CD39, CD30, CD27, a TEK/Ork, IL-15, a soluble IL-15 receptor, Ox 40, GM-CSF, RANKL, RANK, TRAIL, a soluble TRAIL receptor, tissue plasminogen activator, Factor VIII, Factor IX, apolipoprotein E, apolipoprotein A-I, an IL-2 receptor, an IL-2 antagonist, alpha-1 antitrypsin, calcitonin, growth hormone, insulin, insulinotropin, insulin-like growth factors, parathyroid hormone, interferons, superoxide dismutase, glucagon, an erythropoeitin, an antibody, glucocerebrosidase, an Fc-fusion protein, globins, nerve growth factors, interleukins, colony stimulating factors, and a cytokine.
- 22. (Withdrawn) The method of claim 14, wherein the host cell is further genetically engineered to express a selectable marker.
- 23. (Withdrawn) The method of claim 14, wherein the host cell is a mammalian cell.
- 24. (Withdrawn) The method of claim 23, wherein the host cell is selected from the group consisting of CHO, VERO, BHK, HeLa, CV1, MDCK, 293, 3T3, myeloma, PC12 and WI38.

- 25. (Withdrawn) The method of claim 14, wherein the host cell is cultured in protein-free medium.
- 26. (Withdrawn) The method of claim 15, wherein the NF-kappa-B transcription factor is a caspase resistant p65 mutant.
- 27. (Withdrawn) The method of claim 14, wherein the host cell is transiently transfected.
- 28. (Withdrawn) The method of claim 14, wherein the host cell is stably transformed.
- 29. (Withdrawn) The method of claim 15, wherein the host cell is genetically engineered to express a second NF-kappa-B transcription factor.
- 30. (Withdrawn) A method of producing an eukaryotic cell for production of a protein of interest, the method comprising genetically engineering an eukaryotic cell to express a gene that encodes a protein of interest as an extracellular product, and to activate the NF-kappa-B transcription factor complex.
- 31. (Withdrawn) A method of producing a mammalian cell line capable of growth in protein-free medium, the method comprising exposing cells that have been genetically engineered to activate the NF-kappa-B transcription factor complex to protein-free medium, and isolating a cell line that grows in protein-free medium.
- 32. (Withdrawn) The method of claim 31, further comprising exposing the cells to peptone-free medium, and isolating a cell line that grows in peptone-free medium.
- 33. (Withdrawn) A method of producing an eukaryotic cell for production of a protein of interest, the method comprising genetically engineering an eukaryotic cell to express a protein of interest as an extracellular product, wherein the eukaryotic cell has been genetically engineered to activate the NF-kappa-B transcription factor complex.
- 34. (Withdrawn) A method of producing an eukaryotic cell for production of a protein of interest, the method comprising genetically engineering a cell to activate the NF-kappa-B transcription factor complex, wherein the eukaryotic cell expresses a protein of interest as an extracellular product.